REMARKS

In response to the Office Action dated August 24, 2010, the Assignee respectfully requests reconsideration based on the above amendments and on the following remarks.

Claims 1, 5-14, 36, 39-46, and 52 are pending in this application. Independent claim 52 is newly presented. Claims 2-4, 15-35, 37-38, and 47-51 were previously canceled without prejudice or disclaimer.

Rejection under § 112

The Office rejected claims 36 and 39-46 under 35 U.S.C. § 112, first paragraph, for failing to comply with the written description requirement.

This rejection has been rendered moot by amendment. Independent claim 36 has been amended to delete the features rejected by Examiner Saltarelli. The Office is thus respectfully requested to remove the rejection.

Rejection of Claims 1 & 5-6 under § 103 (a)

The Office rejected claims 1 and 5-6 under 35 U.S.C. § 103 (a) as being obvious over U.S. Patent 6,005,861 to Humpleman in view of U.S. Patent 6,493,875 to Eames, et al., in view of U.S. Patent 6,732,366 to Russo, and further in view of U.S. Patent 4,809,069 to Meyer, et al.

This rejection, though, is erroneous. The Office has, very respectfully, misinterpreted the teachings of Humpleman, Eames, Russo, and Meyer. When these cited documents are correctly interpreted, claims 1 and 5-6 cannot be obvious.

Examiner Saltarelli, for example, has misinterpreted the teachings of *Eames*. Examiner Saltarelli contends that Humpleman, Eames, Russo, and Meyer teach "a media data bus

Response to August 24, 2010 Office Action

connected to the system data bus" and "a network bus connected to the system data bus," as independent claim 1 recites. Examiner Saltarelli specifically cites to portions of Eames as teaching these features.

Examiner Saltarelli, though, is mistaken. Examiner Saltarelli has, very respectfully, misinterpreted *Eames's* set of buses. Examiner Saltarelli contends that *Eames* "teaches it is well known to utilize several <u>interconnected buses</u> to route information." *See* Examiner Saltarelli, Office Action mailed August 24, 2010, at page 5, lines 18-20 (emphasis added). *Eames*, however, does <u>NOT</u> teach "interconnected buses." *Eames*, instead, teaches <u>separate</u> buses that are <u>NOT</u> interconnected. As *Eames* explains:

A set of buses 429 is used to route information within gateway 200 and as illustrated in FIG. 3 includes a Time Division Multiplexing (TDM) bus 420, a control bus 422, a MPEG bus 424, and an ATM bus 428.

A number of optional modules can be inserted into gateway 200 including MPEG modules 450, a DAVIC module, and a telephony module 454. All of the optional modules are connected to the control bus 422 in addition to being connected to at least one other bus which provides those modules with the <u>appropriate types of data</u> for the services supported by the module.

See U.S. Patent 6,493,875 to Eames, et al. at column 5, lines 25-35. Eames thus teaches that each bus carries "appropriate types of data." Each bus, in other words, provides specific types of data. The TDM bus 420 provides Time Division Multiplexing information, while the control bus 422 provides control information. Likewise, the MPEG bus 424 provides MPEG information, and the ATM bus 428 provides ATM information. Eames thus teaches separate buses that each provide "appropriate types of data," not "interconnected buses" as Examiner Saltarelli contends. Examiner Saltarelli has thus misinterpreted Eames and, thus, the proposed combination of Humpleman, Eames, Russo, and Meyer.

Examiner Saltarelli has also misinterpreted *Russo*. Examiner Saltarelli contends that *Humpleman*, *Eames*, *Russo*, and *Meyer* teach "a mass storage device connected to the system data bus," as dependent claims 5 and 6 recite, and Examiner Saltarelli specifically cites to portions of *Russo*.

Examiner Saltarelli, though, is mistaken. Examiner Saltarelli has, very respectfully, misinterpreted *Russo's* teachings. *Russo* describes a "high capacity digital storage medium" that is connected to a video switch, not "the system data bus," as independent claim 1 recites. See U.S. Patent 6,732,366 to Russo at column 7, lines 45-46. If "program information is already in digitally compressed form," then the video switch sends the program information to the high capacity digital storage medium. *Id.* at column 7, lines 36-42. If the program information is digital but not compressed, the video switch may connect to a compression engine. *Id.* at column 8, lines 6-20. If the program information is analog, the video switch may connect to an A/D converter. *Id.* at column 8, lines 22-25. So *Russo's* high capacity digital storage medium is connected to a video switch, not "the system data bus," as independent claim 1 recites. Examiner Saltarelli has thus misinterpreted *Russo* and, thus, the proposed combination of *Humpleman, Eames, Russo*, and *Meyer*.

Examiner Saltarelli has also misinterpreted *Meyer*. Examiner Saltarelli contends that *Humpleman*, *Eames*, *Russo*, and *Meyer* teach "a video overlay processor," and Examiner Saltarelli specifically cites to portions of *Meyer*. Even though *Meyer* describes a picture-in-picture processor, *Meyer's* "PIP" processor, however, outputs to a mixer of a "picture enhancement processor." *Meyer's* picture-in-picture processor does not "hav[e] a first input connected to the media bus, a second input connected to the system data bus, and an output connected to the system data bus," as independent claim 1 recites. As *Meyer* explains, the "PIP processor obtains video data from at least one secondary source and arranges the data such that it may be multiplexed with the main video data by a first multiplexer and sent to the mixer of the picture enhancement processor." *See* U.S. Patent 4,809,069 to Meyer, et al. at column 2, lines 32-38. *Meyer* further explains that "the television processing section 10 further includes a picture in picture (PIP) processor 50" that "multiplexes main video data with PIP video data and

Response to August 24, 2010 Office Action

provides a multiplexed field to" the picture enhancement processor (or the "PEP 20"). *Id.* at column 3, lines 35-40. *See also id.* at column 4, lines 37-38 and lines 45-47. These inputs and outputs are also illustrated in *Meyer's* FIGS. 1-11. So, while *Humpleman*, *Eames*, *Russo*, and *Meyer* teach picture-in-picture processor, their picture-in-picture processor does not "hav[e] a first input connected to the media bus, a second input connected to the system data bus, and an output connected to the system data bus," as independent claim 1 recites.

Independent claim 1, then, cannot be obvious over *Humpleman*, *Eames*, *Russo*, and *Meyer*. The proposed combination of *Humpleman*, *Eames*, *Russo*, and *Meyer* fails to teach or suggest many features recited by independent claim 1, as explained above. One of ordinary skill in the art, then, would not think that independent claim 1 is obvious.

Claims 1 and 5-6, then, are not obvious over *Humpleman*, *Eames*, *Russo*, and *Meyer*. Independent claim 1 recites many distinguishing features, and the dependent claims incorporate these distinguishing features. One of ordinary skill in the art, then, would not think that claims 1 and 5-6 are obvious. The Office is respectfully requested to remove the § 103 (a) rejection of these claims.

Rejection of Claim 7 under § 103 (a)

The Office rejected claim 7 under 35 U.S.C. § 103 (a) as being obvious over *Humpleman*, *Eames*, *Russo*, and *Meyer* and further in view of U.S. Patent 5,768,527 to Zhu, *et al.* Claim 7, though, depends from independent claim 1. Claim 7 thus incorporates the same distinguishing features discussed above, and claim 7 also recites additional features. As the above paragraphs explained, *Humpleman*, *Eames*, *Russo*, and *Meyer* fails to teach or suggest all the features of independent claim 1, and *Zhu* does not cure the deficiencies. *Zhu* discloses a "rate scaler" that reduces bit rates of input streams. Still, though, *Humpleman* with *Eames*, *Russo*, *Meyer*, and *Zhu* fails to fails to teach or suggest all the features of independent claim 1. One of ordinary skill in the art, then, would not think that claim 7 is obvious. The Office must remove the § 103 (a) rejection.

Rejection of Claims 8-14 under § 103 (a)

Claims 8-14 were also rejected under 35 U.S.C. § 103 (a) as being obvious over *Humpleman*, *Eames*, *Russo*, and *Meyer* and further in view of U.S. Patent 6,104,861 to Tsukagoshi and further in view of U.S. Patent 5,473,772 to Halliwell, *et al*.

Claims 8-14, though, also depend from independent claim 1. The paragraphs above explained that *Humpleman*, *Eames*, *Russo*, and *Meyer* fail to teach or suggest all the features of independent claim 1, and neither *Tsukagoshi* nor *Halliwell* cure their deficiencies. The Office must remove the § 103 (a) rejection of these claims.

Claims 36 & 39-46

The Office makes no art-based rejection of claims 36 and 39-46. Nonetheless, independent claim 36 has been amended to recite new features. Independent claim 36, for example, has been amended to recite "connecting a digital converter to the multiple pairs to receive the analog information signal and converting the analog information signal to digital information." Support for these features may be found at least in the as-filed application at page 16, line 22 through page 17, line 4 and at FIG. 6. Independent claim 36 has also been amended to recite "connecting decryption logic to the multiple pairs to receive encrypted digital information and decrypting the encrypted digital information to produce decrypted digital information." Support for these features may be found at least in the as-filed application at page 16, line 22 through page 17, line 4 and at FIG. 6.

Claims 36 and 39-46 are not obvious over *Humpleman* with *Eames*, *Russo*, *Meyer*, *Zhu*, *Tsukagoshi*, and/or *Halliwell*. Independent claim 36 recites many distinguishing features, and dependent claims 39-46 incorporate these distinguishing features. One of ordinary skill in the art, then, would not think that claims 36 and 39-46 are obvious. The Office is thus respectfully requested to allow claims 36 and 39-46.

New Independent Claim 52

This response presents new independent claim 52. This new independent claim recites features that are similar to independent claim 36. As the above paragraphs explained, independent claim 36 recites many features that distinguish over *Humpleman* with *Eames*, *Russo*, *Meyer*, *Zhu*, *Tsukagoshi*, and/or *Halliwell*. New independent claim 52, then, must also distinguish. The Office is thus respectfully requested to allow new independent claim 52.

No excess claim fee is due. New independent claim 52 replaces independent claim 30, which was previously canceled. No excess claim fee is thus due.

If any questions arise, the Examiner is invited contact the undersigned at (919) 469-2629 or <u>scott@scottzimmerman.com</u>.

37 C.F.R. § 1.8 CERTIFICATE OF TRANSMISSION

I hereby certify that this correspondence is being electronically transmitted via the USPTO EFS web interface on November 24, 2010.

Scott P. Zimmerman Attorney for the Assignee

Reg. No. 41,390